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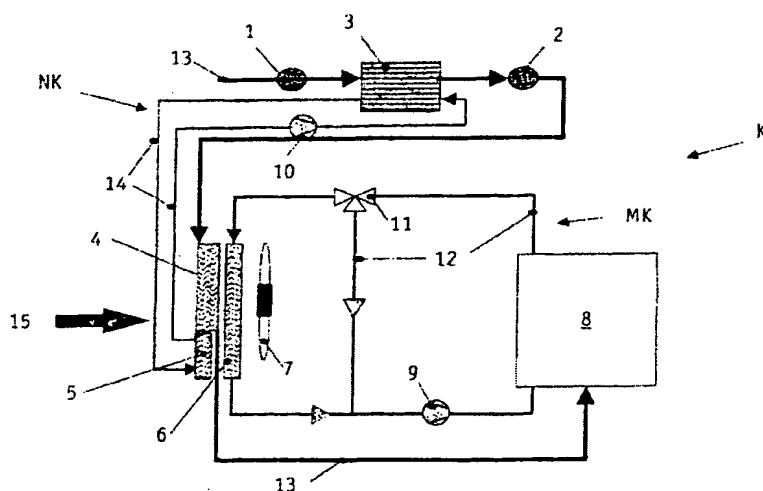
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As printed

(54) Title: CIRCUIT ARRANGEMENT FOR COOLING CHARGE AIR AND METHOD FOR OPERATING A CIRCUIT ARRANGEMENT OF THIS TYPE

(54) Bezeichnung: KREISLAUFANORDNUNG ZUR KÜHLUNG VON LADELUFT UND VERFAHREN ZUM BETREIBEN EINER DERARTIGEN KREISLAUFANORDNUNG



(57) Abstract: The invention relates to a circuit arrangement (K) comprising a low-temperature circuit (NK) for cooling charge air (13) that is fed to a motor (8) in a motor vehicle equipped with a turbocharger. According to the invention, the charge air (13) is compressed in two stages in a first low-pressure turbocharger (1) and a second high-pressure turbocharger (2). To cool the charge air (13) a first cooler (3) is provided downstream of the low-pressure turbocharger (1) and upstream of the high-pressure turbocharger (2) and a second cooler (4) is provided downstream of the high-pressure turbocharger (2) and upstream of the motor (8). The invention also relates to a method for operating a circuit arrangement (K) of this type.

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For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.

(57) Zusammenfassung: Die Erfindung betrifft eine Kreislaufanordnung (K) mit einem Niedertemperatur-Kreislauf (NK) zur Kühlung von Ladeluft (13), die einem Motor (8) zugeführt wird, bei einem Kraftfahrzeug mit einem Turbolader, wobei eine zweistufige Verdichtung der Ladeluft (13) in einem ersten Niederdruck-Turbolader (1) und einem zweiten Hochdruck-Turbolader (2) erfolgt, wobei 15 zur Kühlung der Ladeluft (13) nach dem Niederdruck-Turbolader (1) und vor dem Hochdruck-Turbolader (2) ein erster Kühler (3) und nach dem Hochdruck-Turbolader (2) und vor dem Motor (8) ein zweiter Kühler (4) vorgesehen ist, sowie ein Verfahren zum Betreiben einer derartigen Kreislaufanordnung (K).